

PATENT
USSN 10/044,692
TTC Docket 002640US
Geron Docket 018/213c

CLAIM AMENDMENTS

1. *(Previously presented)* A composition comprising a recombinant nucleic acid vector or plasmid that encodes:
 - a) human telomerase reverse transcriptase (hTRT) protein (SEQ. ID NO:2); or
 - b) a polypeptide fragment of SEQ. ID NO:2 consisting of at least 20 contiguous amino acids which is immunogenic for a specific response against hTRT (SEQ. ID NO:2).

2 to 9. CANCELLED

10. *(Previously presented)* The composition of claim 1, further comprising an adjuvant.
11. *(Withdrawn)* A method for eliciting an antibody response specific for human telomerase reverse transcriptase in a subject, comprising administering to the subject the composition of claim 1.
12. *(Withdrawn) (Currently amended)* A method for eliciting an antibody response specific for human telomerase reverse transcriptase in a subject, comprising administering to the subject the composition nucleic acid vector or plasmid of claim 21.
13. *(Withdrawn) (Currently amended)* A method for eliciting an antibody response specific for human telomerase reverse transcriptase in a subject, comprising administering to the subject the composition nucleic acid vector or plasmid of claim 23.
14. *(Withdrawn)* A method for eliciting an antibody response specific for human telomerase reverse transcriptase in a subject, comprising administering to the subject the composition of claim 25.
15. *(Withdrawn)* A method for eliciting an antibody response specific for human telomerase reverse transcriptase in a subject, comprising administering to the subject the composition of claim 30.

16 to 18. CANCELLED

19. *(Currently amended)* The composition of claim 1, comprising an amount of said nucleic acid vector or plasmid that encodes a polypeptide effective for eliciting an immunological response specific for hTRT protein (SEQ. ID NO:2) in a mammalian subject.

PATENT
USSN 10/044,692
TTC Docket 002640US
Geron Docket 018/213c

20. *(Original)* The composition of claim 1, packaged in a container along with an indication of how the composition is to be administered.
21. *(Previously presented)* A recombinant nucleic acid vector or plasmid that encodes hTRT (SEQ. ID NO:2) or a fragment of SEQ. ID NO:2 of least 10 contiguous amino acids, wherein said fragment is immunogenic for a specific response against hTRT (SEQ. ID NO:2).
22. *(Currently amended)* The nucleic acid composition of claim 1, wherein the nucleic acid vector or plasmid encodes full-length hTRT protein (SEQ. ID NO:2).
23. *(Currently amended)* The nucleic acid vector or plasmid of claim 21, which encodes a fragment of SEQ. ID NO:2 of at least 20 contiguous amino acids.
24. *(Currently amended)* The nucleic acid vector or plasmid of claim 21, which encodes a fragment of SEQ. ID NO:2 of at least 50 contiguous amino acids.
25. *(Previously presented)* A composition comprising an isolated nucleic acid that encodes a chimeric protein consisting of an immunogenic fragment of SEQ. ID NO:2 fused to another protein that enhances the immune response to said fragment of SEQ. ID NO:2.
26. *(Previously presented)* The nucleic acid composition of claim 25, wherein the other protein is keyhole limpet hemocyanin (KLH).
27. *(Currently amended)* The nucleic-acid composition of claim 1, wherein the nucleic acid vector or plasmid is DNA.
28. *(Currently amended)* The nucleic-acid composition of claim 1, wherein the nucleic acid vector or plasmid is RNA.
29. *(Currently amended)* The nucleic-acid composition of claim 1, wherein the nucleic-acid is contained said hTRT or said fragment is encoded in a plasmid.
30. *(Currently amended)* The nucleic-acid composition of claim 1, wherein the nucleic-acid is contained said hTRT or said fragment is encoded in a viral vector.
31. *(Currently amended)* The nucleic-acid composition of claim 1, wherein the nucleic-acid is contained said hTRT or said fragment is encoded in an adenovirus vector.

PATENT
USSN 10/044,692
TTC Docket 002640US
Geron Docket 018/213c

32. *(Currently amended)* The nucleic acid composition of claim 1, wherein the nucleic acid is contained said hTRT or said fragment is encoded in a herpes virus or Epstein Barr Virus vector.

33. *(Previously presented)* A recombinant nucleic acid in which an encoding region is operably linked to a promoter that controls expression of said encoding region,
wherein said encoding region encodes hTRT protein (SEQ. ID NO:2) or a fragment of SEQ. ID NO:2 of at least 20 contiguous amino acids; and
wherein said fragment is immunogenic for a specific response against hTRT (SEQ. ID NO:2).

34 to 38. CANCELLED

39. *(Previously presented)* A recombinant nucleic acid vector or plasmid that encodes hTRT (SEQ. ID NO:2), or a fragment of SEQ. ID NO:2, wherein said vector or plasmid comprises at least about 50 consecutive bases of SEQ. ID NO:1;
and wherein said fragment is immunogenic for a specific response against hTRT (SEQ. ID NO:2).

40. *(Currently amended)* The nucleic acid vector or plasmid of claim 39, wherein said fragment is encoded by at least about 100 consecutive bases of SEQ. ID NO:1.

41. *(Previously presented)* An isolated recombinant nucleic acid comprising an encoding region operably linked to a promoter that controls expression of said encoding region,
wherein said encoding region encodes hTRT protein (SEQ. ID NO:2) or a fragment of SEQ. ID NO:2, wherein said encoding region comprises at least about 50 consecutive bases of SEQ. ID NO:1; and
wherein said fragment is immunogenic for a specific response against hTRT (SEQ. ID NO:2).

42. *(Previously presented)* The nucleic acid of claim 41, wherein said fragment is encoded by at least about 200 consecutive bases of SEQ. ID NO:1.

PATENT
USSN 10/044,692
TTC Docket 002640US
Geron Docket 018/213c

43. *(Previously presented)* An isolated recombinant nucleic acid that encodes a fragment of SEQ. ID NO:2, wherein said fragment consists of at least 50 consecutive amino acids, and wherein said fragment does not have telomerase catalytic activity when cotranslated with telomerase RNA component, but wherein said fragment is immunogenic for a specific response against hTRT (SEQ. ID NO:2).

44 to 46. CANCELLED.

47. *(Previously presented)* The nucleic acid of claim 43, further comprising a promoter to control expression of said polypeptide.

48. *(Previously presented)* The nucleic acid of claim 43, contained in a plasmid vector.

49. *(Previously presented)* The nucleic acid of claim 43, contained in a viral vector.

50. *(Previously presented)* The nucleic acid of claim 43, contained in an adenovirus vector, a herpes virus vector, or Epstein Barr Virus vector.

51. *(Previously presented)* The composition of claim 25, wherein said nucleic acid further comprises a promoter to control expression of said chimeric protein.

52. *(Previously presented)* The composition of claim 25, wherein the nucleic acid is contained in a plasmid vector.

53. *(Previously presented)* The composition of claim 25, wherein the nucleic acid is contained in a viral vector.

54. *(Previously presented)* The composition of claim 25, wherein the nucleic acid is contained in an adenovirus vector, a herpes virus vector, or Epstein Barr Virus vector.

55. *(Currently amended)* The nucleic acid composition of claim 30, wherein the nucleic acid also contains viral sequences for replication and packaging of the vector.

PATENT
USSN 10/044,692
TTC Docket 002640US
Geron Docket 018/213c

56. *(Currently amended)* The nucleic acid composition vector or plasmid of claim 21, wherein codons in said encoding region comprises altered codons selected have been altered to increase the rate of peptide expression of said hTRT or said fragment.

57. *(Currently amended)* A composition comprising an isolated RNA encoding a fragment of SEQ. ID NO:2 of at least 20 contiguous amino acids which is immunogenic for a specific response against hTRT (SEQ. ID NO:2)
A composition comprising a recombinant RNA that encodes:
a polypeptide fragment of SEQ. ID NO:2 consisting of at least 20 contiguous amino acids,
which is immunogenic for a specific response against hTRT (SEQ. ID NO:2).